

In the Matter of)
)
SPECTRUM POLICY TASK FORCE) ET Docket 02-135
)
To: The Commission)

An effective and efficient use of spectrum must address a complex mix of services including, commercial and public radio, public safety, military, national defense, telephone, wireless broadband networks, data

transmission, radio-reading, short-range wireless LANs, wireless home networks, intentional emitters (such as garage door openers), ham radio, mesh networks of computers accessing Neighborhood Access Points for Internet use, data collection by astronomers, and numerous other uses that will emerge as spectrum policies promote innovation—which will in turn address and cultivate a blend of public service, public safety, utility, and private use expectations by the public at large.

3. SRG proposes that the Commission incorporate a “*spectrum easement*” concept for certain services. Commission policies should provide, in real estate terms, a *spectrum easement* that incorporates *tolerance-averse services* of over-riding public good.

Spectrum policies must recognize the different *service tolerances* of different services—including *tolerance-averse services*. As numerous Comments highlighted, some services, most notably military, public emergency use, public safety, and national security services, must be absolutely dependable. Public broadcasting has a unique obligation to deliver universal service at no cost. Other services might have a greater tolerance for some occasional failures or interference problems at the margin, and in fact might evolve more effectively in that atmosphere.

While SRG does not necessarily concur with the specific regulatory or technical approaches suggested by parties who provide *tolerance-averse services*, we urge the Commission to incorporate the concept of these *spectrum easements* into its spectrum policies framework.¹¹

4. The Commission’s spectrum policies framework should anticipate and incorporate the capacity for change. The policy framework must allow the Commission to speedily adapt to lessons learned, adjust to the most effective ways to enforce transmission and interference standards, and invoke cooperation by various parties with different economic interests.

It was clear for decades, for example, that comparative hearings for contested reserved band spectrum were leading to protracted and expensive deadlocks that precluded use of the contested spectrum for public benefit. The current point system for resolving mutually exclusive noncommercial educational broadcast applications may or may not prove more effective, but it is convoluted, complicated and contradictory—linked to aging premises rather than a long-term solution. This is one example from the world of public radio that highlights the need for policy based on the *public’s* interest rather than the interests of broadcasters and the importance of an atmosphere in which the Commission can

institute change in a timely fashion. Spectrum policies need to allow and to anticipate change as the Commission learns from successes and failures and adapts for the future.

Another current example of deadlock is the FM Auction situation. Today, following court cases and months of internal review at the Commission, FM Auction #37 of 359 commercial fm frequencies, initially scheduled for February, 2001, has still not occurred. This past month the FCC decided to prohibit noncommercial educational licensees from applying for licenses for new services in the lower 700 MHz band because the involvement of that group of licensees threatened to delay or derail that auction.

The FCC's initial approach in FM Auction #37 was to give a bidding credit to public radio licensees by virtue of not attributing reserved spectrum broadcast stations to their ownership criteria. This approach would have most likely resulted in more public radio service in the end. This approach could have been used in the auction of the lower 700 MHz band as well. The bidding credit was an example of a logical, practical, public-service driven approach.

Public radio, as well as the public at large, will benefit if the Commission can employ new techniques without finding itself with its hands tied in terms of implementation.

5. The spectrum policies framework must address a matrix of issues—different services will require different techniques and approaches at different points in time. SRG believes the major components of such a matrix include: transmission standards, receiver standards, interference standards, enforcement techniques, fees and licensing terms, and service tolerances.

The FCC's flexibility concerning Part 15 spectrum use, for example, has clearly promoted innovation and drive to use spectrum more efficiently and to develop services, such as cordless telephones, wireless broadband networks, and wireless LANS and home networks. At the same time, the public has benefited from the FCC's oversight of the power and frequency of electromagnetic radiation emissions of unintentional emitters, such as televisions and personal computers, and its certification and FCC-approved lab test requirements for manufacturers of intentional emitter devices, such as garage door openers and cordless telephones. And at some point in the future, for some services, consumer expectations and service providers' own economic self-interest may negate the need for some parts of this oversight.

Receiver design offers another example. While it is unlikely that long-term and persistent entwinement in issues of receiver design would be justified in terms of public interest benefits and economic costs to taxpayers there are times when involvement is both appropriate in terms of the public interest and spectrum efficiency.

In the case of broadcast radio, for example, IBOC digital radio transmission includes bandwidth beyond that required for the FM analog and FM digital main channel. This capacity can be used for a variety of purposes, including a secondary audio stream and various data applications. The successful deployment of any of this capacity depends upon the availability of receivers that will receive, decode, and present the additional material. One model is universally available receivers that would make a secondary channel or data services available to the general public. The other model is proprietary devices that would be marketed in conjunction with the service itself, such as current SCA receivers. It is very likely, however, that marketplace forces alone will not bring about a timely shift in receiver design despite the promise of more efficient spectrum use and public benefit that would accrue.

6. SRG predicts that in the long term there will be true spectrum scarcity and that the Commission must employ spectrum policies that anticipate little or no margin for clearing out or renovating the Spectrum Commons to accommodate public good services, particularly tolerance-averse public good services.

At this time, the inefficiencies of current spectrum policies are all but overwhelming and shape an atmosphere in which Commission staff are caught between frustrated potential service-providers, businesses and individuals, and the various interest groups who have a stake in preserving the status quo or perceive that change is worse than the current situation. It is clearly in the public interest to move forward in a way that both preserves current benefits to the public and realizes the significant advantages for the public that more efficient use of spectrum can bring about.

The more speedily the Commission moves to making the spectrum a *Commons*, though, with all the policy shifts this implies, the more rapidly we will evolve from the current artificial scarcity construct to real spectrum scarcity. For the most part, the market is the most practical solution to a shake-out in the best interest of the public.

Spectrum policies may address the construction of the *spectrum easement* services through auction bidding credits for non-profits,

restrictions on licenses that limit spectrum uses to public services, or other techniques—and the Commission may or may not employ and preserve such old-style techniques such as set-aside of reserved and non-reserved broadcast spectrum. ^{III}

7. Finally, the Commission, working in partnership with organizations with an interest in this proceeding, should review existing statutory language and other pertinent governmental policies to assure a consistency with the Commission's work.

As a specific example, SRG believes that current statutory language that prohibits the Commission from requiring that noncommercial educational licensees resolve mutually exclusive situations through the auction process was crafted with the notion that it would be applied to reserved broadcast band situations. Unfortunately, it has been used more broadly with respect to auctions on other portions of the radio spectrum, most recently resulting in the ban on the participation of noncommercial licensees in the auction of lower 700MHz band.

SRG urges the Spectrum Policy Task Force to add a review of statutory language that might unnecessarily or inadvertently restrict or compromise its ability to manage spectrum in a rational manner with maximum public benefit.

Respectfully Submitted,

*Terry Clifford, co-CEO
Station Resource Group*

July 23, 2002

^I See in particular Comments of: The New American Foundation, The Consumer Federation of America, Consumers Union, The Association of Independent Video and Filmmakers, The National Alliance for Media Arts and Culture, The Benton Foundation, The Center for Digital Democracy, United Church of Christ, Office of Communication, Inc., And The Media Access Project; National Public Radio; Association of Public Television Stations; The Association of Public-Safety Communications Officials-International; Professor Barnaby Rickett, Department of Electrical and

Computer Engineering, University of California San Diego; and W. Miller Goss, Acting Director of National Radio Astronomy Observatory.

II Comments of The Association of Public-Safety Communications Officials-International; which state: “ A public service agency must have ubiquitous coverage over all of its area of jurisdiction . . . A firefighter or police office cannot afford to be “out of range” when calling for assistance . . . In contrast, commercial systems can tolerate “holes” in areas that have few subscribers or would be expensive to cover with an adequate signal;” National Public Radio; the Association of Public Television Stations; and Professors Gerald R. Faulhaber and David J. Farbar of the Wharton School at the University of Pennsylvania, who state: “For many purposes, static allocation is the efficient solution; AM-FM and TV broadcasting of continuous content to the existing huge base of relatively simple receivers will be a very important spectrum use for years to come, and static allocation works perfectly for this application. But dynamic allocation for certain uses can improve the efficiency of spectrum allocation, perhaps dramatically.”

III See in particular the Comments of The New American Foundation, The Consumer Federation of America, Consumers Union, The Association of Independent Video and Filmmakers, The National Alliance for Media Arts and Culture, The Benton Foundation, The Center for Digital Democracy, United Church of Christ, Office of Communication, In., And The Media Access Project; and Professors Gerald R. Faulhaber and David J. Farbar of the Wharton School at the University of Pennsylvania.